AMENDMENTS TO THE CLAIMS:

Claim 1. (Currently amended) An optical communication system ~~for amplifying an optical signal propagating through a front optical transmission line mounted at a front stage by using an optical amplifier in an optical repeater and emitting the amplified optical signal to a back optical transmission line mounted at a back stage~~, comprising:

a front optical transmission line mounted at a front stage;

a back optical transmission line mounted at a back stage;

an optical repeater formed between said front optical transmission line and said back optical transmission line, said optical repeater comprising an optical amplifier for amplifying an optical signal input from said front optical transmission line and emitting the amplified optical signal to said back optical transmission line; and

a transmission line compensating device to generate control light which is input to one of said front and back optical transmission lines to produce a Raman amplification effect within said one of said front and back optical transmission lines mounted outside of said optical repeater based on a control signal corresponding to an optical signal level input from said front optical transmission line, ~~and~~

wherein said optical amplifier is disposed between said transmission line compensating device and the other one of said front and back optical transmission lines.

Claim 2. (Currently amended) The optical communication system according to Claim 1, wherein said transmission line compensating device is so configured as to send said control light to said front optical transmission line mounted outside of said optical repeater, and

wherein said optical amplifier is disposed between said transmission line compensating device and said back optical transmission line.

Claim 3. (Currently amended) The optical communication system according to Claim 1,

wherein said transmission line compensating device is so configured as to send said control light to said back optical transmission line mounted outside of said optical repeater, and

wherein said optical amplifier is disposed between said transmission line compensating device and said front optical transmission line.

Claim 4. (Original) The optical communication system according to Claim 1, wherein said transmission line compensating device is mounted inside said optical repeater.

Claim 5. (Previously presented) The optical communication system according to Claim 1, wherein said transmission line compensating device is separately and individually mounted outside said optical repeater.

Claim 6. (Previously presented) The optical communication system according to Claim 1, wherein said transmission line compensating device further comprises:

two or more control light sources to generate control lights having different wavelengths and outputs; and

an optical multiplexer to multiplex said control lights light fed from said two or more control light sources.

Claims 7-13. (Canceled)

Claim 14. (Currently amended) An optical repeater for connecting between a front optical transmission line and a back optical transmission line, comprising:

an optical amplifier for amplifying an optical signal propagating through said front optical transmission line mounted at a front stage and sending the amplified optical signal to said back optical transmission line mounted at a back stage; and

a transmission line compensating device to generate control light which is input to one of said front and back optical transmission lines to produce a Raman amplification effect within

said one of said front and back optical transmission lines mounted outside of said optical repeater based on a control signal corresponding to an optical signal level input from said front optical transmission line, ~~and~~

wherein said optical amplifier is disposed between said transmission line compensating device and the other one of said front and back optical transmission lines.

Claim 15. (Currently amended) The optical repeater according to Claim 14, wherein said transmission line compensating device is so configured as to send said control light to said front optical transmission line mounted outside of said optical repeater, and

wherein said optical amplifier is disposed between said transmission line compensating device and said back optical transmission line.

Claim 16. (Currently amended) The optical repeater according to Claim 14, wherein said transmission line compensating device is so configured as to send said control light to said back optical transmission line mounted outside of said optical repeater, and

wherein said optical amplifier is disposed between said transmission line compensating device and said front optical transmission line.

Claims 17-18. (Canceled)

Claim 19. (Previously presented) The optical repeater according to Claim 14, wherein said transmission line compensating device further comprises:

two or more control sources to generate control lights having different wavelengths and outputs; and

an optical multiplexer to multiplex said control lights fed from said two or more control light sources.

Claim 20. (Previously presented) An optical repeater for connecting between a first front

optical transmission line and a first back optical transmission line making up an upward transmission line which form an upward transmission line, and between a second front optical transmission line and a second back optical transmission line which form a backward transmission line, said repeater comprising:

a first optical amplifier for amplifying an optical signal propagating through said first front optical transmission line and sending the amplified optical signal to said first back optical transmission line;

a second optical amplifier for amplifying an optical signal propagating through said second front optical transmission line and sending the amplified optical signal to said second back optical transmission line;

a first transmission line compensating device to generate control light which is input to one of said first front and first back optical transmission lines to produce a Raman amplification effect within said one of said first front and first back optical transmission lines based on a control signal corresponding to an optical signal level input from said first front optical transmission line, said first optical amplifier being disposed between said first transmission line compensating device and the other one of said first front and first back optical transmission lines;

a second transmission line compensating device to generate control light which is input to one of said second front and second back optical transmission lines to produce a Raman amplification effect within said one of said second front and second back optical transmission lines based on a control signal corresponding to an optical signal level input from said second front optical transmission line, said second optical amplifier being disposed between said second transmission line compensating device and the other one of said second front and second back optical transmission lines.

Claim 21. (Previously presented) The optical repeater according to Claim 20, wherein said first/second transmission line compensating device is so configured as to send said control light to said first/second optical transmission line, and

wherein said first/second optical amplifier is disposed between said first/second

transmission line compensating device and said first/second back optical transmission line

Claim 22. (Previously presented) The optical repeater according to Claim 20, wherein said first/second transmission line compensating device is so configured as to send said control light to said first/second back optical transmission line, and

wherein said first/second optical amplifier is disposed between said first/second transmission line compensating device and said first/second front optical transmission line.

Claims 23-24. (Canceled)

Claim 25. (Previously presented) The optical repeater according to Claim 20, wherein said transmission line compensating devices further comprise:

two or more control sources to generate control lights having different wavelengths and outputs; and

an optical multiplexer to multiplex said control lights fed from said two or more control light sources.

Claims 26-40. (Canceled)

Claim 41. (Previously presented) The optical communication system according to Claim 1, wherein said transmission line compensating device further comprises:

a light receiving circuit for detecting the optical signal level input from said front optical transmission line; and

a control circuit for generating the control light based on the detected optical signal level fed from said light receiving circuit.

Claim 42. (Previously presented) The optical repeater according to Claim 14, wherein said transmission line compensating device further comprises:

a light receiving circuit for detecting the optical signal level input from said front optical transmission line; and

a control circuit for generating the control light based on the detected optical signal level fed from said light receiving circuit.

Claim 43. (Previously presented) The optical repeater according to Claim 20, wherein said first/second transmission line compensating device further comprises:

a first/second light receiving circuit for detecting the optical signal level input from said front optical transmission line; and

a first/second control circuit for generating the control light based on the detected optical signal level fed from said first/second light receiving circuit.

Claim 44. (New) The optical communication system according to Claim 1, wherein said control light is input to said front optical transmission line and said optical amplifier is disposed between said transmission line compensating device and said back optical transmission line.

Claim 45. (New) The optical communication system according to Claim 44, wherein said optical signal is amplified by said optical amplifier after being compensated by said Raman amplification effect in said front optical transmission line.

Claim 46. (New) The optical communication system according to Claim 44, wherein said optical signal is compensated by said Raman amplification effect in said front optical transmission line before being amplified by said optical amplifier.

Claim 47. (New) An optical communication system, comprising:

an optical repeater formed between a front optical transmission line and a back optical transmission line, said optical repeater comprising an optical amplifier for amplifying an optical signal input from said front optical transmission line and emitting the amplified optical signal to

said back optical transmission line; and

a transmission line compensating device for generating a control light which is input to said front optical transmission line to produce a Raman amplification effect within said front optical transmission line based on a control signal corresponding to an optical signal level input from said front optical transmission line,

wherein said optical amplifier is disposed between said transmission line compensating device and said back optical transmission line.